

Title (en)
FERROELECTRIC CHIRAL SMETIC LIQUID CRYSTAL COMPOSITION AND LIGHT SWITCHING ELEMENT

Publication
EP 0206228 A3 19890531 (EN)

Application
EP 86108266 A 19860618

Priority
JP 13281785 A 19850618

Abstract (en)
[origin: EP0206228A2] @ A ferroelectric chiral smectic liquid crystal composition affording a high response speed and being cheap so that a high speed switching can be effected, which composition comprises at least one achiral smectic C compound and at least one chiral smectic C compound, characterized in that at least one of said at least one achiral smectic C compound contains at least two divalent six-membered rings, directly linked by at least one single bond, at least one of said at least two divalent six-membered rings being selected from pyrimidin-2,5-diyl, pyridin-2,5-diyl, 1,4-phenylene or trans-1,4-cyclohexylene. A light switching element using the above chiral smectic liquid crystal composition is also provided.

IPC 1-7
C09K 19/42; **C09K 19/46**

IPC 8 full level
C09K 19/34 (2006.01); **C09K 19/20** (2006.01); **C09K 19/22** (2006.01); **C09K 19/42** (2006.01); **C09K 19/44** (2006.01); **C09K 19/46** (2006.01); **C09K 19/48** (2006.01); **G02F 1/13** (2006.01); **G02F 1/137** (2006.01); **G02F 1/141** (2006.01); **G09F 9/35** (2006.01)

CPC (source: EP US)
C09K 19/42 (2013.01 - EP US); **C09K 19/46** (2013.01 - EP US)

Citation (search report)
• [XP] EP 0178647 A2 19860423 - CHISSO CORP [JP], et al
• [E] WO 8606401 A1 19861106 - MERCK PATENT GMBH [DE]
• [X] GB 1596014 A 19810819 - SECR DEFENCE
• [XP] WO 8602937 A1 19860522 - SECR DEFENCE BRIT [GB], et al
• [A] EP 0136725 A2 19850410 - CHISSO CORP [JP], et al
• [O] PROCEEDINGS OF THE TENTH INTERNATIONAL LIQUID CRYSTAL CONFERENCE, York, 15th-21th July 1984; & MOLECULAR CRYSTALS AND LIQUID CRYSTALS, vol. 129, no. 1/3, July 1985, pages 61-74; J.P. LE PESANT et al.: "Optical switching of chiral smectic C at room temperature" (Cat. P,X) (pages 62,64,65)
• [E] PATENT ABSTRACTS OF JAPAN, vol. 12, no. 84 (C-482)[2931], 17th March 1988; & JP-A-62 223 172 (CHISSO CORP.) 01-10-1987
• [E] PATENT ABSTRACTS OF JAPAN, vol. 12, no. 70 (C-479)[2917], 4th March 1988; & JP-A-62 209 190 (ALPS ELECTRIC CO.) 14-09-1987

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